


Engineer: Bruce Page	Date: 1/29/04	 <b>JPS Communications</b> 5800 Departure Drive, Raleigh, NC 27616			
Drawn: Bruce Page	Date: 1/29/04				
Approved: JAC	Date: 2/3/04	Title: ACU RADIO APPLICATION NOTES			
Issued/ Revised	Date: 8/17/06	Size: A	Dwg. #: <b>5961-271259-APP</b>	Rev: <b>B2</b>	Sheet: 1      Of    1

**APPLIES TO:**

Kenwood TK-272G Portable Radio  
Kenwood TK-3160 Portable Radio  
Kenwood TK-2170 / TK-3170 Portable Radios

**RADIO MODIFICATIONS:**

None required.

**RADIO PROGRAMMING:**

None required.

**RADIO CONTROLS:**

1. Adjust the Volume Control until the yellow "SIGNAL" indicator on the associated DSP Module flashes with receive audio. Should be about in the mid-range (12 o'clock) position.

**CABLING:**

Standard ACU-1000 and ACU-T Interface cables are made up of a 2 foot TRP Radio Tray Interface cable and the appropriate 13-foot Extension cable.

ACU-1000 Interface Cable	JPS P/N 5961-291259	(5961-271259 + 5961-261002-00)
ACU-T Interface Cable	JPS P/N 5961-281259	(5961-271259 + 5961-281013-00)
TRP-1000 Shelf Interface Cable	JPS P/N 5961-271259	

**DSP-1 JUMPERS:**

JP1	Low Impedance *
JP2	Balanced *

**DSP PROGRAMMING:**

RX Level	3*	0dBm*
TX Level	6*	0dBm*
Squelch Type	VOX*	
COR Polarity	Active Low*	
High Frequency Equalizer	4*	Flat*
RX Audio Delay	2*	100 ms*
TX Audio Delay (Radio Type)	0*	No Delay*
Noise Reduction Value	0*	Off*
VOX/VMR Threshold	1*	Med1*
VOX/VMR Hang Time	3*	775 ms*
COR Inhibit After PTT	1*	100 ms*
All Others	As needed	

(\* Indicates Default Value)

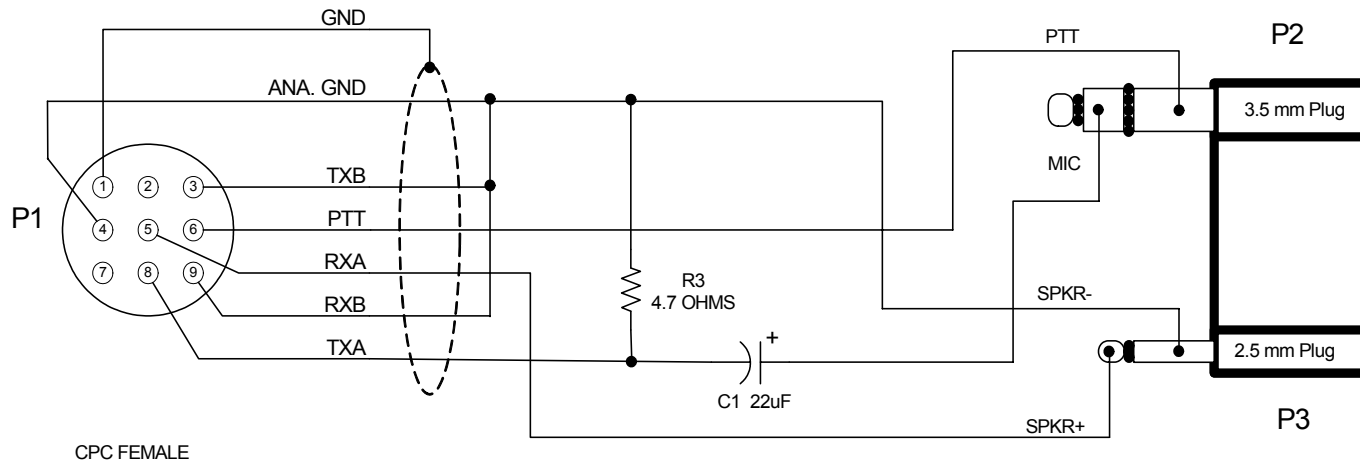
**NOTES:**

# PURCHASED PART

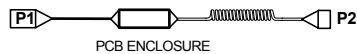
Rev	ECO	Date
B2		8-17-06

USE MOLDED CABLE  
(JPS P/N 5961-261003-00)

DUAL CONNECTOR  
TAKEN FROM KENWOOD  
SPEAKER MIC ASSEMBLY KMC-21  
(JPS PN 0314-025900)



## CABLE DETAIL



STRETCHED CABLE LENGTH MINIMUM 2 FEET

USED WITH:  
KENWOOD TK-272G PORTABLE  
KENWOOD TK-3160 PORTABLE  
KENWOOD TK-2170 / TK-3170 PORTABLE

COMPONENT PCB  
(JPS P/N 5961-271000)

C1 JPS P/N 0321-220250  
R3 JPS P/N 1820-047000  
JU2  
JU4  
JU5  
JU6

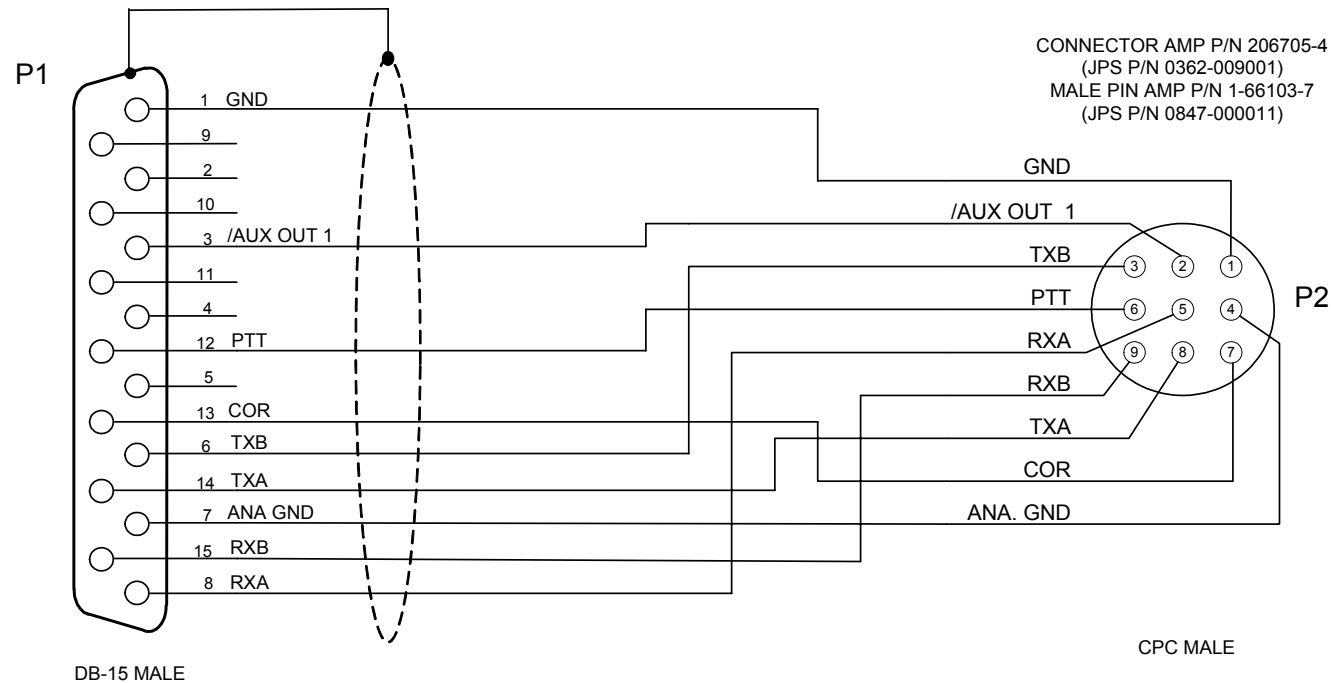
NOTES: SHIELD DRAIN CONNECTED TO PIN 1 OF P1 ONLY.

FOR DETAILED CABLE ASSEMBLY INSTRUCTIONS SEE  
5961-271001-CBL.

Designed By:	RBP	<b>Raytheon JPS Communications</b>		
Drawn By:	RBP	Title CABLE, CPC TO KENWOOD TK-272G, TK-3160		
Checked By:	JAC	Size A	Document Number <b>5961-271259</b>	Rev B2
		Issued Date	JANUARY 21, 2004	Sheet <u>1</u> of <u>1</u>

# PURCHASED PART

Rev	ECO	Date
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- NOTES: 1) USE BELDEN 9934 SHIELDED CABLE.  
2) CONNECT SHIELD DRAIN TO SHELL OF P1 ONLY.  
3) CONNECTORS P1 AND P2 MUST BE MOLDED TO THE CABLE.  
4) CABLE MUST BE LABELED WITH THE RAYTHEON/JPS P/N AND REV, VENDOR CODE AND DATE (MM/YY).

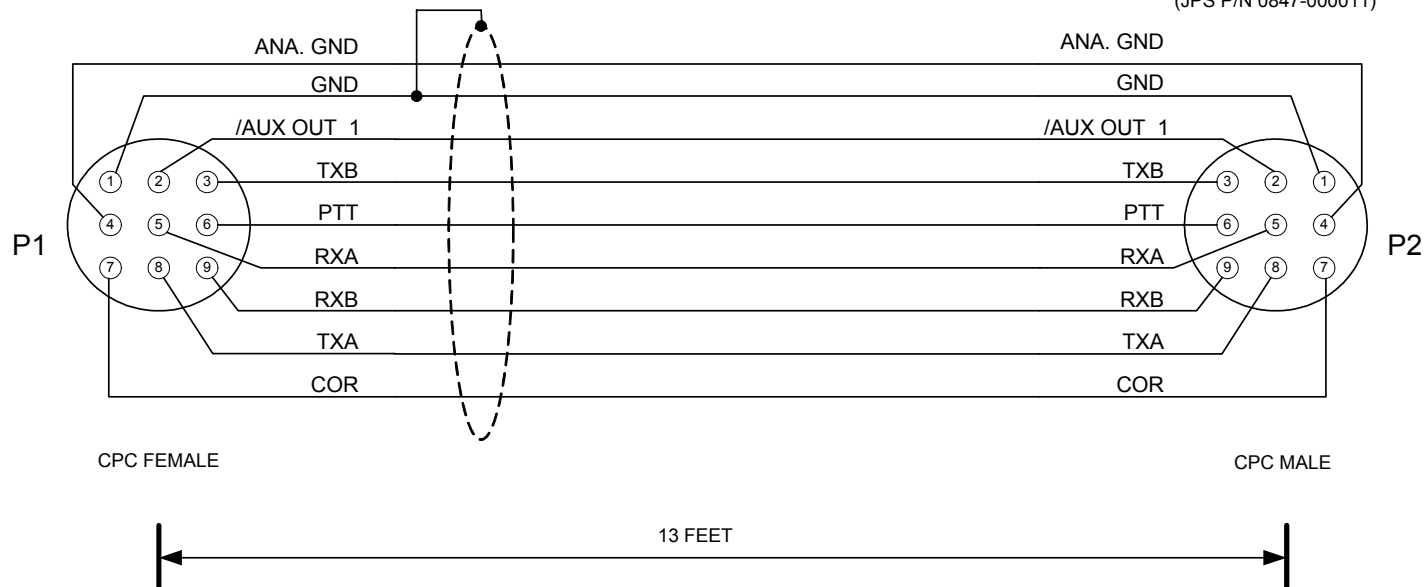
Designed By: JAC	<b>Raytheon JPS Communications</b>		
Drawn By: JAC	Title CABLE, ACU-1000 RADIO EXTENSION - 13 FT		
Checked By: RBP	Size A	Document Number <b>5961-261002-00</b>	Rev A
Issued Date JANUARY 5, 2004		Sheet <u>1</u> of <u>1</u>	

Rev	ECO	Date
A		

## PURCHASED PART

CONNECTOR AMP P/N 206708-1  
(JPS P/N 0362-005003)  
FEMALE PIN AMP P/N 1-66105-8  
(JPS P/N 0362-005002)

CONNECTOR AMP P/N 206705-4  
(JPS P/N 0362-009001)  
MALE PIN AMP P/N 1-66103-7  
(JPS P/N 0847-000011)



- NOTES: 1) USE BELDEN 9934 SHIELDED CABLE.  
2) CONNECT SHIELD DRAIN TO PIN 1 OF P1 ONLY.  
3) CONNECTORS P1 AND P2 MUST BE MOLDED TO THE CABLE.  
4) CABLE MUST BE LABELED WITH THE RAYTHEON/JPS P/N AND REV, VENDOR CODE AND DATE (MM/YY).

Designed By: JAC	<b>Raytheon JPS Communications</b> Raleigh, NC USA		
Drawn By: JAC	Title CABLE, ACU-T RADIO EXTENSION - 13 FT		
Checked By: RBP	Size A	Document Number <b>5961-281013-00</b>	Rev A
Issued Date JANUARY 5, 2004		Sheet <u>1</u> of <u>1</u>	